

outlet of the bridging component and defining from the inlet of the bridging component to the outlet of the bridging component a generally lateral third flow direction;

wherein the inlet of the bridging component is fluidly connected to the outlet of the first manifold and the outlet of the bridging component is fluidly connected to the inlet of the second manifold, and the third flow direction is generally transverse to the first flow direction.

24. The gas panel of claim 23, wherein the bridging component is an active component.

25. The gas panel of claim 24, wherein the active component is a valve.

26. The gas panel of claim 23, wherein the bridging component is a connector block.

27. The gas panel of claim 23, wherein the third flow direction is generally transverse to the second flow direction.

28. A gas panel comprising:

a first manifold having an inlet and an outlet accessing a common surface of the first manifold, and a fluid passageway connecting the inlet of the first manifold to the outlet of the first manifold and defining from the inlet of the first manifold to the outlet of the second manifold a generally lateral first flow direction;

a second manifold having an inlet and an outlet accessing a common surface of the second manifold, and a fluid passageway connecting the inlet of the second manifold to the outlet of the second manifold and defining from the inlet of the second manifold to the outlet of the second manifold a generally lateral second flow direction; and

a bridging component having an inlet and an outlet accessing a common surface of the bridging component, and a fluid passageway connecting the inlet of the bridging component to the outlet of the bridging component and defining from the inlet of the bridging component to the outlet of the bridging component a generally lateral third flow path;

wherein the inlet of the bridging component is fluidly connected to the outlet of the first manifold, and the outlet of the bridging component is fluidly connected to the inlet of the second manifold, and the third flow direction is aligned with the first flow direction.

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29. The gas panel of claim 28, wherein the bridging component is an active component.

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30. The gas panel of claim 29, wherein the active component is a mass flow controller.

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31. The gas panel of claim 29, wherein the active component is a valve.

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32. The gas panel of claim 28, wherein the bridging component is a connector block.

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33. The gas panel of claim 28, wherein the second flow direction is aligned with the third flow direction.

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34. The gas panel of claim 33, wherein the active component is a mass flow controller.

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35. A gas panel comprising:

a first manifold having an inlet and an outlet accessing a common surface of the first manifold, and a fluid passageway connecting the inlet of the first manifold to the outlet of the first manifold and defining from the inlet of the first manifold to the outlet of the first manifold a generally lateral first flow direction;

a second manifold having an inlet and an outlet accessing a common surface of the second manifold, and a fluid passageway connecting the inlet of the second manifold to the outlet of the second manifold and defining from the inlet of the second manifold to the outlet of the second manifold a generally lateral second flow direction; and

an active component having an inlet and an outlet accessing a common surface of the active component, and a fluid passageway connecting the inlet of the active component to the outlet of the active component and defining from the inlet of the active component to the outlet of the active component a generally lateral third flow direction;

wherein the inlet of the active component is adapted to directly mate to the outlet of the first manifold and the outlet of the active component is adapted to directly mate to the inlet of the second manifold.

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36. The gas panel of claim <sup>13</sup> 35, wherein the active component is a valve.

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37. The gas panel of claim <sup>13</sup> 35, wherein the active component is a mass flow controller.

<sup>16</sup>  
38. The gas panel of claim <sup>13</sup> 35, wherein the inlet of the active component is adapted to directly mate from a first direction to the outlet of the first manifold.

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